

# Data Manipulation

Stored Program

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# Stored Program

## Early

### ✓ **computers**

✓ Not flexible

✓ Steps (Algorithm) was part of the CPU.

✓ Next thing was to rewire the CPU

✓ A breakthrough of storing the program in Main memory.

incorrectly credited to John Von Neumann.

# Recall Addition Algorithm

Adding values stored in memory

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Step 1. Get one of the values to be added from memory and place it in a register.

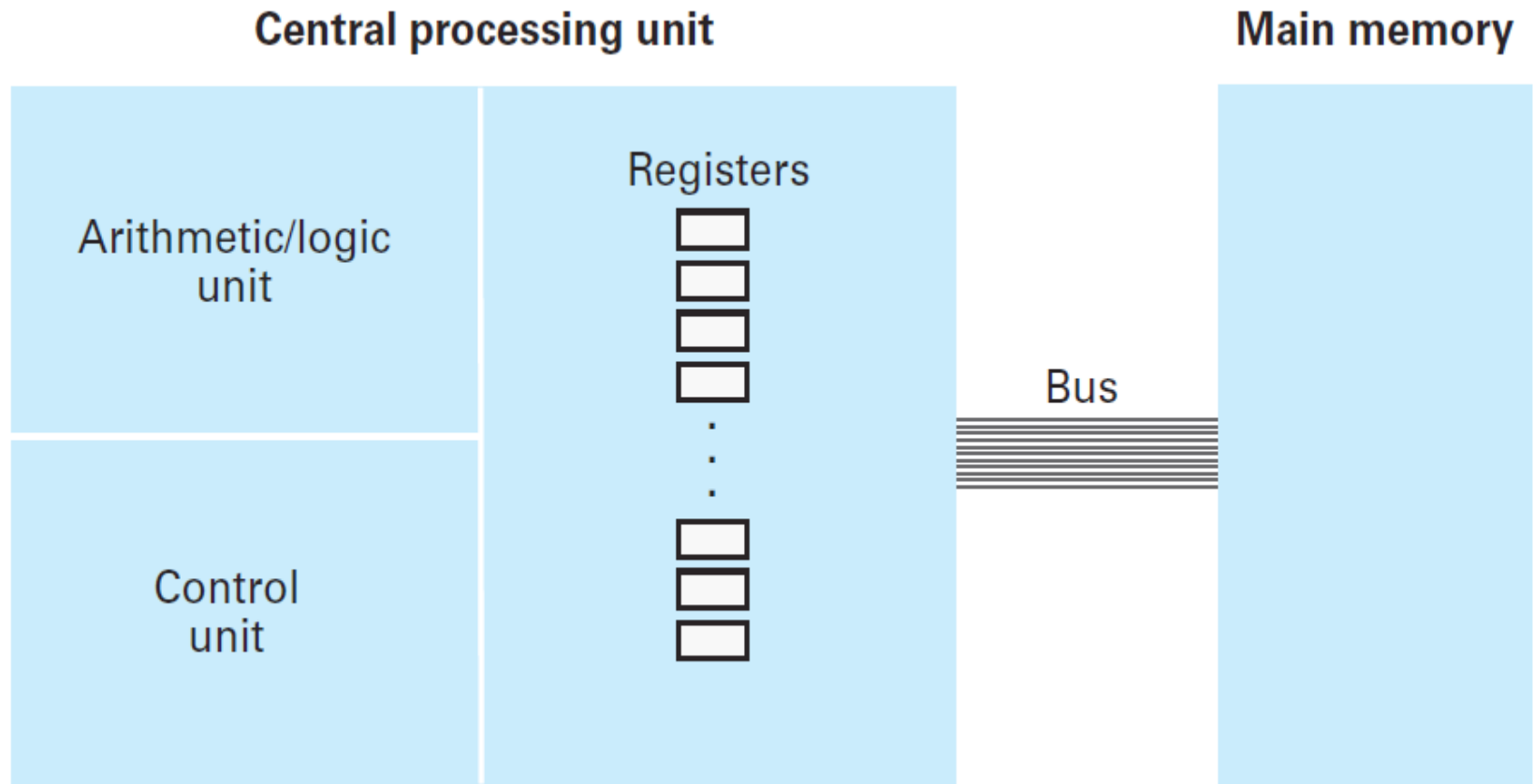
Step 2. Get the other value to be added from memory and place it in another register.

Step 3. Activate the addition circuitry with the registers used in Steps 1 and 2 as inputs and another register designated to hold the result.

Step 4. Store the result in memory.

Step 5. Stop.

# Stored Program



# Summary

## **Stored Program**

- ✓ Putting algo within CPU
- ✓ Rewiring of CPU
- ✓ Stored programs